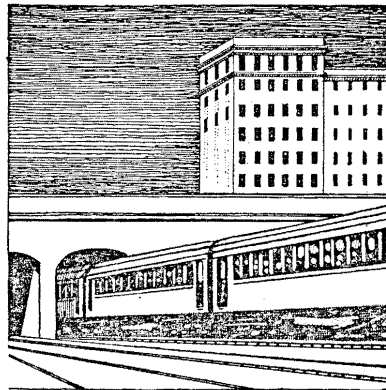
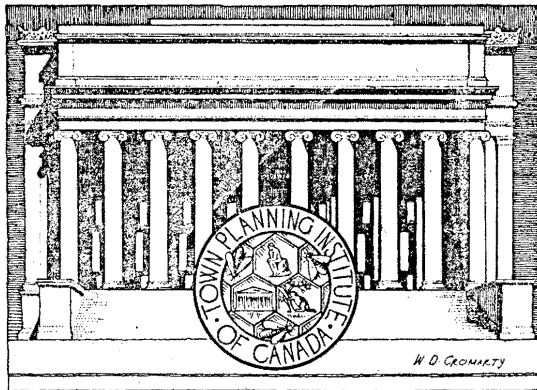


# THE JOURNAL



## TOWN PLANNING INSTITUTE OF CANADA.

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NO. 9

### EDITORIAL

#### Obligatory Town Planning in Canada.

Provincial legislation in town planning and rural development was adopted by the province of Saskatchewan in December 1917, giving the director of town planning under the Department of Municipal Affairs the power to call upon any city, town or village within the province to prepare an orderly plan for its future development within three years so that the expensive mistakes, the disorder and ugliness that have so often characterised the growth of towns and cities might be avoided in the province of Saskatchewan.

To an orderly mind which appreciates the value of method, system, economy in effort and expense such a step would seem to be a natural and logical outcome of what the whole world is learning of the benefits of town planning.

Speaking from a purely business point of view and as president of the United States Housing Corporation, Mr. L. K. Sherman, stated at a Chicago conference: "We have learned that proper town planning and planting can increase the selling value of a house more than any other dollar of investment."

From a social point of view the proofs are accumulating that the development of a town plan may be so guided and guarded that the social evils which are the despair of the modern city may not have opportunity to grow and that infant life may

be saved to the extent of 75 per cent. There are towns in Canada where 300 children die out of every 1000 born before they reach their first birthday.

It cannot be denied that each of these considerations is worthy of regard. Business must be carried on; the preservation and enrichment of social life means conservation of human energy and human happiness—which is the real source of energy—and the cultivation of beauty, external and internal, which is the end of education.

These are all legitimate considerations for those who have the responsibility of shaping the development of towns and cities.

#### The Compulsion of Law.

To achieve these ends the surest, the most just and the quickest way would seem to be by the method of law which is believed to be the embodiment of the will of the people as expressed through their representatives. The compulsion of law for the preservation of life had to be applied to factories and workshops many years ago. Manufacturers are not allowed to expose their workers to needless risks of life and limb. The town is a factory and workshop for the making of citizens. The ideal of law is the protection of those who are not able to protect themselves. Let a town grow up on the method of land sweating and for the supposed benefit of a few real estate owners only and sooner or later the price will be paid in waste of life and by

men, women and children who were not in the least responsible for the conditions that demanded their sacrifice.

The meaning and essence of law is to restrain the evil doer. A New York lawyer told an acquaintance recently that as a good citizen he was obeying 21,260 laws and these did not include numerous ordinances, regulations, etc., issued by police, fire department and others. If the provincial authorities or the municipal authorities were discovered going to a man and saying: "You must not make any more slums in this town and you must not destroy the nice homes of the people by building something near to them that will take their light and air and the quiet and charm of their surroundings," it is perhaps safe to say that most good citizens would warmly applaud them.

### **Compulsion by Consent.**

The compulsion of the Saskatchewan Town Planning Act is not from without; it is compulsion by consent. In introducing the bill the Hon. George Langley said: "We have not drawn the bill without consulting with our city, town and municipal authorities and they are generally agreed that the provisions of the bill are fair and workable and if properly put into effect something like a reorganization may be made in the plan of our cities."

From all villages, towns and cities in Saskatchewan the province has now the power to ask for by-laws that will:

(1) fix the building lines of all existing roads and all new roads so as to preserve the utility and beauty of streets;

(2) reserve land for new thoroughfares that may be needed later in the interests of future civic economy;

(3) reserve land for parks and open spaces so that there will be always room for children and adults to play;

(4) limit the number of separate family dwellings to the acre and the percentage of the building area on the lots so as to prevent over-crowding and slum conditions;

(5) set aside certain districts or zones for different civic uses such as industry, commerce and residences to prevent destruction of home values;

(6) classify agricultural land into different uses to prevent waste of human energy on unprofitable soil;

(7) prohibit the carrying on of noxious trades or manufactures or the erection of bill-boards among the residences of the people; and,

(8) regulate the width of streets according to their uses in order to save the expense of unnecessarily wide roads.

### **A New Liberty.**

It may be said that Saskatchewan has never passed a single law that will so profoundly affect her destiny or add more to her fame as a democratic province governed by the people and for the people. The potentialities of the new law for human good are incalculably great. It is a new liberty that is being sought, the liberty of men and women to breathe clean air and have room to live in decency and comfort. The fulfilment of the law will depend to a large extent upon the quality of the officers who have charge of it and these are the people's representatives, but it will also depend upon the local organizations, social welfare societies, churches and clubs and the price of the new liberty from the tyranny of land-sweating will be eternal vigilance.

### **Administration Busy.**

There is every sign that the administrative officials are fully impressed with the importance of the opportunity for shaping the towns of Saskatchewan to better uses of life and industry. The town planning branch has prepared various procedure regulations and by-laws for the guidance of the towns, villages and hamlets. The framers of the act realized that a jumble town usually begins as a hamlet or village and wisely placed no population limit to the operations of town planning method. A question in the legislature of January 17 revealed the fact that 238 applications have been made to the director of town planning for approval of new developments; that 52 plans of new townsites have been approved and that 10 of these have been organized as villages with reasonable chance of working to a plan of development that will co-ordinate the various activities and save future waste of change, expensive mistakes and ugly confusion. The total area of lands covered by the applications is 12,010 acres of which 10,000 acres represent land laid out for farm plots or market gardens, thus demonstrating that rural planning is receiving as much attention as town planning. Of the remainder, 162 acres represent land intended for school sites and public reserves, which is a demonstration

of the economy of providing for these needs before land values multiply because of the existence of such social necessities.

### Need of Public Support.

The chief problem appears to be in persuading local authorities that orderly development is for the common good. Owing to existing business depression and continued shortage of houses councils are loath to discuss plans of future improvement or to submit to building restrictions. Laissez-faire methods have prevailed so long and particular individuals have so often benefitted by confusion at the expense of the community that many civic officials find it difficult to rise to the conception of the cash value, not to mention other values, of community order and beauty. It is not easily realized that the reason why people go to live in a place and bring with them the potential values that attach to family settlement is because the place has attractions for family life and not simply for making a livelihood. The province of Saskatchewan has one of the most advanced town planning acts in the world and has the distinction of first putting an obligatory town planning act in operation. It is a good twelve months ahead of British procedure and has only Nova Scotia as a near competitor. The Saskatchewan Act will need behind it the support of public opinion and it would seem that a great opportunity has been presented to women's organizations, welfare societies, churches and all who realize that bad development of civic life is the cause of all the chronic evils that affect social life and consume the energies and money of palliative agencies, often to extremely little effect when the generative conditions of the evil are ever present. Students of town planning will find in the Saskatchewan Act the end of the drift of town planning legislation and should secure for themselves a copy of the act with the various procedures and regulations that affect its operation.

### New York Zoning.

Nearly all the private houses erected in New York since the adoption of its zoning law have been built in the districts set aside by the law for detached houses. Nobody cares to run the risk of having a garage or a warehouse next to his home when he can avoid it.

American Civic Association.

### A FEDERAL DISTRICT FOR OTTAWA.

A proposal for a Federal District which attempts to overcome previous objections to such a project by providing for the control of the physical features and public utilities only of Ottawa and Hull, leaving all other provincial and municipal prerogatives undisturbed.

### The Capital City of Canada.

The completion of the new parliament buildings may be accepted as a sign that Ottawa is to remain the capital city of the Dominion of Canada for all time. The planning, therefore, of the capital city is a matter of more than local interest. Every Canadian citizen who visits Ottawa has the right to feel that in some real sense he is a citizen of the capital city and he has a right to expect that some effort will be expended by the Dominion Government to make the national seat of its operations conform to the dignity, order and beauty which every country demands from its capital city. The town planning history of the two greatest capitals of the Anglo-Saxon world—London and Washington—is the history of plans rejected at critical points of their development and later repentance in terms of millions of dollars of useless expense.

Ottawa has grown to its present dimensions without a plan beyond the provision for the parliament buildings and the elementary conception of an ever-extending checker board where houses, manufactories, business premises, churches and schools have been planted on some handy piece of ground that happened to be vacant, with a continuous destruction of home values. It has subdivisions of this character at present for a population ten times its present number. Many fine buildings have been erected without reference to any scheme of composition and in juxtaposition to property that will degrade their splendour so long as bricks and mortar hold together. Some of the environs of the river have been saved for public enjoyment by the foresight of the Dominion Government and some excellent parkways have been constructed as a special contribution to the city of Ottawa in lieu of taxes.

There is, however, no sense in hiding the fact that whole districts of slum development have been allowed to grow up both within and without the city, which seriously threaten not only the physical aspect of the capital and its reputation as a city meant to be beautiful by nature and by the prophets of its destiny who gave it its present privilege, but threaten also the health of the community and the welfare and wholesomeness of family life.

### The City of Hull, Que.

Across the interprovincial boundary—which is an imaginary line in the middle of the Ottawa river—is the city of Hull, which cannot be dissociated from the social activities of the Capital and which cannot be shut out from its chief view points. In the development of its physical features the city of Hull has not been very fortunate and so far it has not profited by any concessions to its adornment on the part of the Dominion Government. The once beautiful stretch of its foreshore was early monopolized by a large manufactory behind which the city of Hull hides its physical existence and its community life in a planless congeries of buildings. The development of the city of Hull is an abiding testimony to the need of a provincial town planning department which should have the power, in the interest of and for the protection of the Canadian people, to insist upon a plan of development wherever there are signs of the beginning of communal life. In the province of Saskatchewan such a law is in operation as it is in the mother country.

#### A. Federal District.

Discussion of a Federal District in the past has always taken for granted that such a project would involve legislative union between the two cities of Ottawa in Ontario and Hull in Quebec under the control of the Dominion Government, which seemed to involve the disfranchisement of the citizens on both sides of the boundary and the complete loss of municipal autonomy. Those who have studied the government of the District of Columbia have realized, with something of a shock, that the Capital of the great republic has forsworn in its own administration those democratic principles which are the *raison d'être* of the nation and in the government of its Federal District has disfranchised its citizens. The Federal District of the United States is practically a sovereign state governed by the collective authority of the other states and not by the votes of its resident citizens. Possibly the next shock is the realization that the system works very well.

In the new proposal for a Federal District of Ottawa as the capital, submitted to a sub-committee of the Senate by Mr. Noulan Cauchon, consulting engineer and town planner and illustrated in this issue of *The Journal*, it is suggested that a Federal District Commission should be created by an enabling act of the Dominion parliament to control and develop the physical features and public services of a large area embracing the two cities of Ottawa and Hull and environs. It is proposed that under this act the municipalities be given the power to trans-

fer voluntarily to the Federal District Commission the exercise of such of their powers, granted under their respective provincial acts, as they may see fit. It is claimed that this proposal would not involve the immediate appropriation of large sums of money by the Dominion Government. It would mean the creation of a small body of experts to plan and guide development; to see that what was done was done right and as an integral part of a larger plan which would be considered and developed when circumstances required and permitted. Each feature of the plan would only be undertaken on its own merits and as necessity justified its inception.

#### Plan in Detail.

The plan of the Federal District presented with this issue covers key factors only of town planning in relation to the Capital.

#### 1. Railways.

The reorganization of the railway trackage and terminals, as shown on the accompanying map, would eliminate all the unnecessary duplications of trackage, maintenance and overhead expense. This organic plan of the terminals gives the maximum of efficiency in convenience and operation; it includes the elimination of all level crossings on running tracks—industrial spurs apart. The railway plan includes a new railway crossing of the Ottawa for heavy power, a short line west and the abandonment of the present bridges to electric and highway purposes.

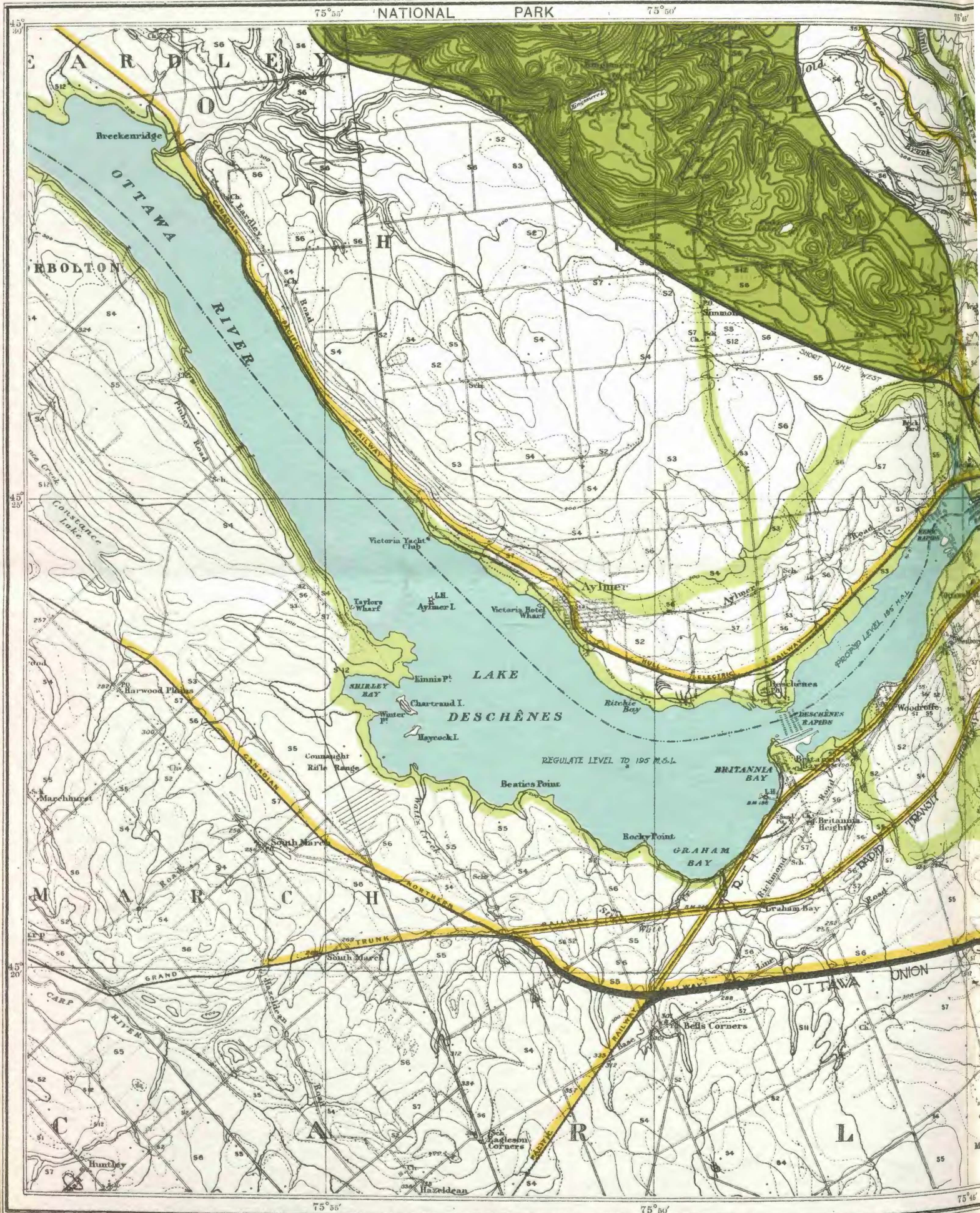
The City Council of Ottawa, 17th October, 1921, on recommendation of the Board of Control, endorsed the efforts of the Plan Commission of Ottawa (provincial authority) "towards negotiating with the railways a tentative plan for the re-organization and improvement of the railway entrances and of the terminal facilities of Ottawa, such plan to be submitted for consideration of the Council as soon as progress can be reported."

#### II. Released Railway Rights of Way and Rapid Transit Railways.

Long rights of way radial to the city which become released from railway use will be converted into fast radial highways. Embankments will be broadened out to accommodate electric trackage in the centre and motor roads alongside; grade separations will be maintained and further added to, whilst the right of way will be maintained free of access except approximately every half mile to enable rapid communications with the city. This rapid facility is designed to extend the time-distance and thereby multiply the area available for homes; to keep down

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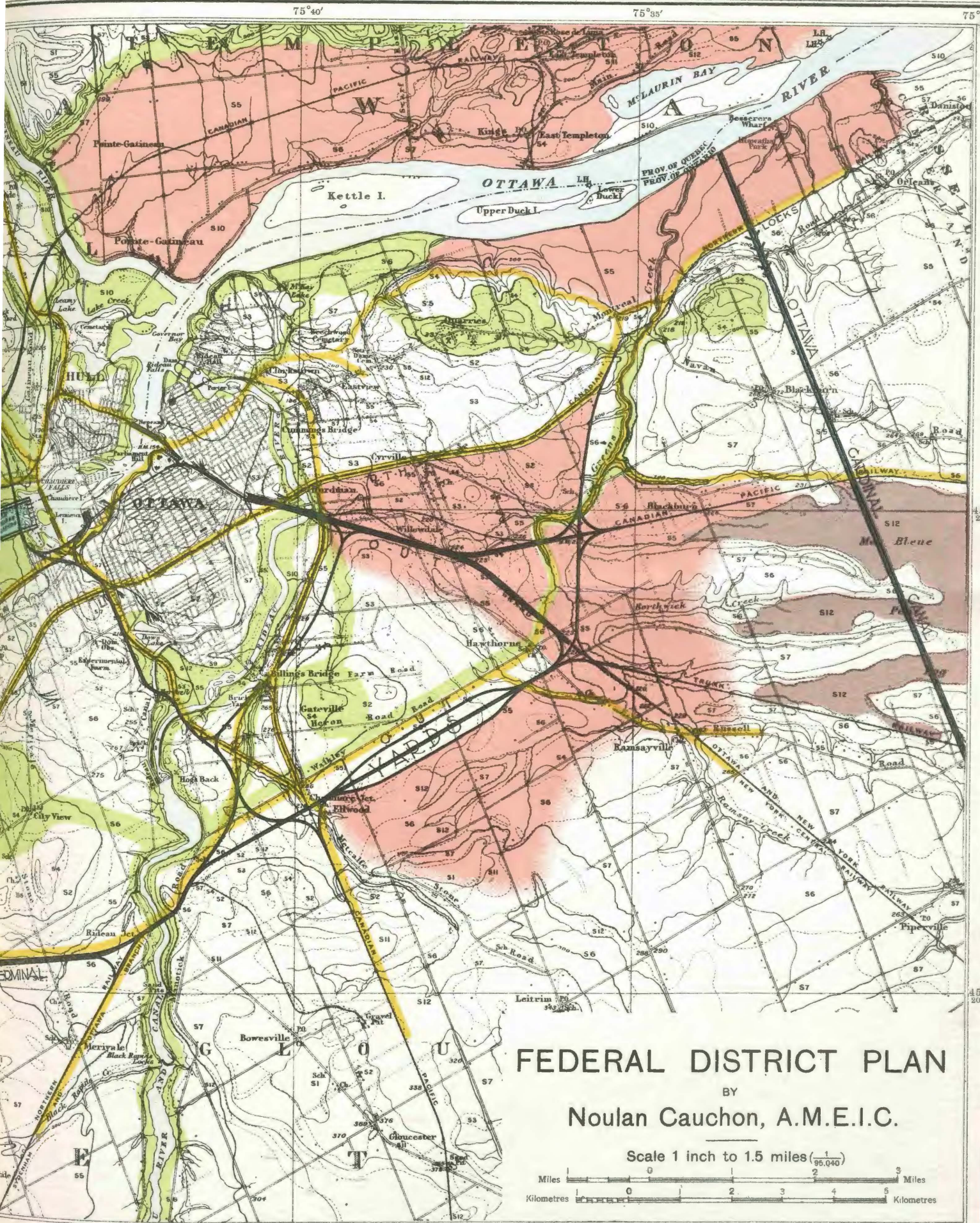
COPIED FROM GEOLOGICAL SURVEY MAP

The plan shows the following:—

- I. Railway terminal re-organisation—new crossing of Ottawa river and short line to the west, in heavy black lines.
- II. Rapid transit highways derived from obsolete rights-of-way and further extending parallel to railways and elsewhere, in yellow.
- III. Power dam and Lake Deschênes extension to the City, in dark blue.

IV. Land  
an  
V. Oct  
per  
VI. Inc





Antian Mountains National Park, in dark green; other park areas  
 a-Cardinal canal as proposed, in light green.  
 International Deep Waterway—the all-Canadian alternative to the St. Law-  
 rian distriete, in red.



Tentative and alternative schemes have been studied for dealing with the Rideau Canal within and without the city and for distributing irrigation from the Rideau River throughout much of the district to increase fertility and insure crops, to render gardens and small holdings tenable and profitable adjacent to the city and its markets.

The Railway Terminal Scheme on the plan published in this issue is the one upon which the present Plan Commission of the city is basing its appeal.

The Rideau River has been determined as the median line of the future between residential areas on the west and industrial activity on the east of it. The prevailing winds are from the west and north-west insuring the drifting away from the residential and business section and towards the open country of all objectional smoke, dust and odors. A substantial section of the open country referred to is a peat bog and sparse in population.

A large industrial area entirely below the city on the Ottawa River and a corresponding industrial area on the Hull side will hold between them the Harbour of the Federal District. It is proposed that this Harbour and harbour area will be controlled by the State as in the case of the Harbour Commissions of Quebec, Montreal, Toronto and Hamilton.

The other industrial areas east of the Rideau River are also served by the "Union Terminals."

### Congestion vs. Fresh Air.

If every owner in a city should build his house over his entire lot, the result would be obviously unbearable. Sunlight and fresh air would be excluded, except in the narrow slits we call streets. Heretofore, this has been recognized, but only tentative or piecemeal regulations have been adopted, though tenement house laws have focused attention on this feature. A minimum of sunlight and fresh air is necessary; a maximum is desirable. Below the minimum disease lurks. As we reach the maximum personal efficiency reaches its acme. We are all used to seeing the heights of buildings, but their width and breadth, the amount of God's earth they cover, is not seen except by airmen. Garden cities in Europe have demonstrated that workingmen's children who live in houses twelve to the acre instead of in slums with forty houses to the acre actually are two to three inches taller and ten to twelve pounds heavier than their brothers and sisters of the slums. The new areas built under zoning regulations must head off slums.

American Civic Association.

### PLANNING FOR SUNLIGHT.

By Percy E. Nobbs, M.A., F.R.I.B.A.

#### The Misuse of Light.

I am sometimes impelled to think that nothing distinguishes us from the beasts that perish so much as our faculty for forgetting first principles, and we do it proudly—for the words 'trite', 'truism', 'platitude', 'obvious' and 'sophism' have become the worst bad words of criticism. Now, the beasts eat what is good for them, but do not overeat, or are so happily constituted that overeating is good for them. They drink when they are thirsty, and when they are not, all the King's men, who are not veterinary surgeons, cannot induce a gulp. They rest when they are weary, and they run, or fly, or swim, when they are rested, and above all they use the light to see by or the dark to conceal their activities. Now, quite apart from such political controversies as that of "Mr. Borden's time" in relation to "God's own time" or daylight saving, it is in the misuse of light that we have become past masters. So, I must hark back to first principles before enlarging on this theme, at the risk of achieving the obvious and perpetrating platitudes.

#### Windows.

Those arts which depend on vision as the avenue of approach between the spirits of men: painting, sculpture and the group of arts of design in which architecture plays the part of double bass, and dress that of high treble, are all as nothing to the blind. The phenomenon of susceptibility to light in all its myriad manifestations is after all at the root of the appreciation of things seen. That, presumably, is why, to be true to our type and not behave with the simple sanity of the beasts, we go to great expense to make windows, with all they imply in heat-losses, and draughts and repairs and replacements to sun blinds, double sashes and rollers, and then keep half of their area permanently shuttered or sunblinded, and to complete the idyll, dress them up in underclothes and overskirts. The object, if object there be is something so absurdly instinctive—a relic perhaps, of our cave life, not so very long ago—may, or may not, be to conceal our apparatus of life on account of its inherent ugliness, or its inherent dustiness. At least, the effect is to render invisible whatever we have that may be worth looking at.

On the other hand, there is a proper use of both

\*Address to the Women's Art Society of Montreal, illustrated by 30 slides showing seventeenth century Dutch interiors and modern ones by Messel, Hoffman, Norman Shaw and Sir Robert Lorimer.



curtains and blinds, so as to improve the aspects of visibility by diffusing, transfusing, reflecting, or otherwise mellowing the light of which I shall have something to say later, in a practical, cold-blooded sort of way, avoiding the obvious temptation to generalize on the fine art of living, for I have never met anyone who was not quite set in his or her ways in that respect, and I am too old to look well in camel's hair or to raise a voice in the wilderness, and there is more than enough of that being done in these days, to our general sorrow.

Therefore, at the risk of proving deadly dull (in which case I crave your forbearance) I will first deal with one very practical matter affecting our homes, and a matter which receives less attention than it deserves—Sunshine.

### Sunshine.

Now the immediate world outside a proper home is a garden of some sort, and nobody can begin to think about laying out a garden except in relation to the sun and the winds. But it is just as important to lay out a home as to lay out a garden, with due consideration for the sun and the winds, for the things that grow in a home are every bit as susceptible as the things that grow in a herbaceous border to due sunshine and due shade. And when a house is rightly disposed as to the sunshine it lets in or keeps out, it is bound to be right also in relation to its garden, and then we have the home complete and unified as far as the wit of man can bring it about.

A room that doesn't harbour a sunbeam for at least an hour a day is not a really habitable room in this latitude, for without direct sunlight it will be a place where microbes are prone to multiply. A person who is sick and confined to such a room will make a slow recovery. A chronic invalid confined in such a room will die sooner than he would in one swept by the sun even for one brief hour a day.

When a house stands in a garden, it is quite easy so to plan it as to provide each room with at least an hour's sunshine, and the problem becomes one of selecting which hour of sun to apportion to each room.

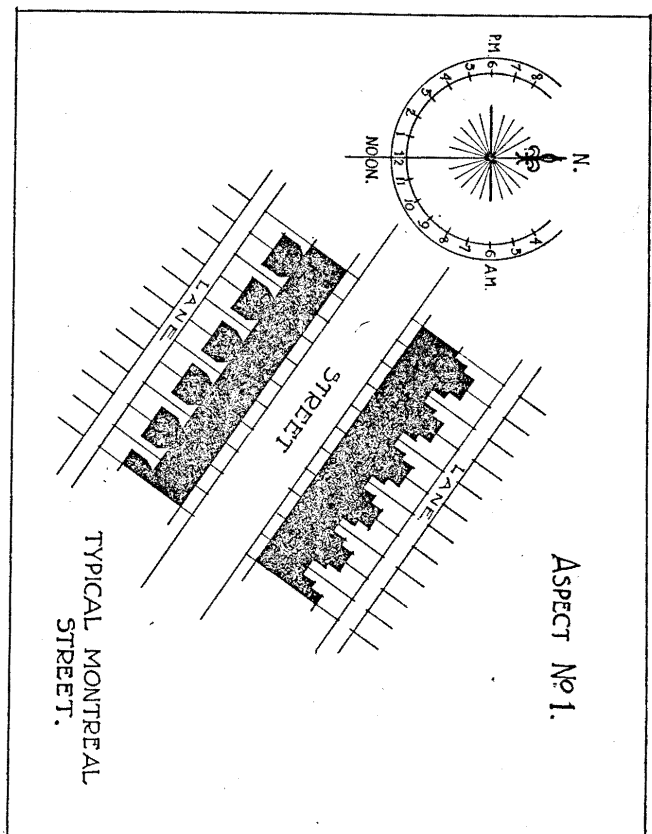
And it is possible, by taking thought, to so plan a pair of semi-detached houses that about three rooms out of four have some sunshine daily (provided always there is not a ten-storey apartment house casting a blighting shadow over the site).

But in the closer formations in which houses group themselves in terraces, in tenements and in apartment houses, the fair distribution of sunshine becomes increasingly difficult.

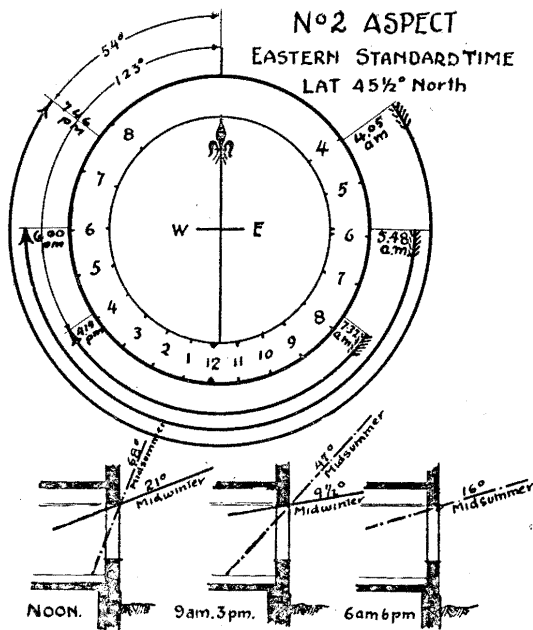
### Streets.

It follows from the movement of the sun across the heavens in our latitude, that streets with houses on them should run due N. and S. so that every window may get some E. or W. sunlight, morning or afternoon, while the bleak N. and the blistering S. are avoided as exposures.

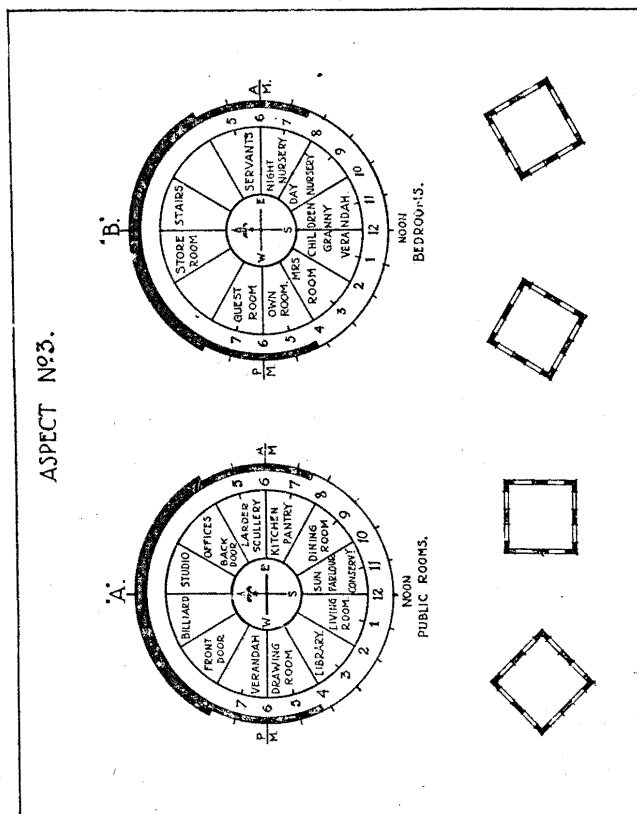
The compass bearing of all the residential **No. 1** raced streets of Montreal, and most of **M. St.** the similar streets of Westmount, is unfortunate in this respect for the houses on one side of these streets have the best of the bargain in the S.W. front exposure, while those on the other mope in the shade, and on both sides the individual houses have an over-sunned and an over-shaded side.



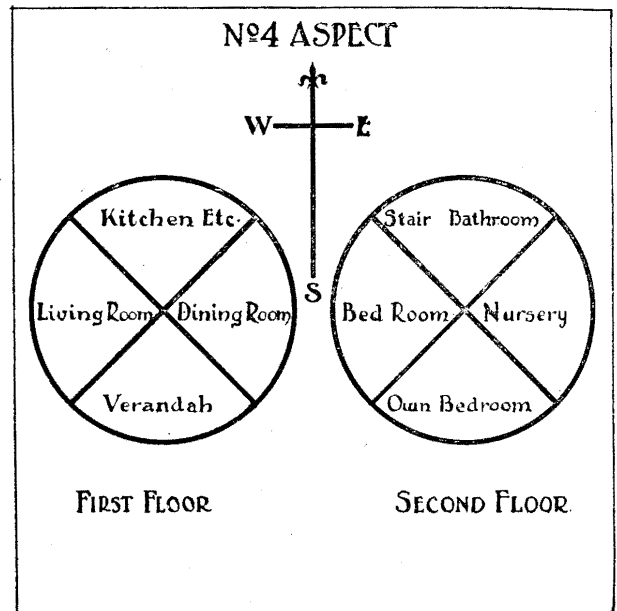
Let us consider the aspect diagram for this part **No. 2** of the world and note how far the sun goes **Aspect** round above the horizon in the winter and in the summer and at the equinoxes which are the average also for the whole year. We may also consider how deep the summer and winter suns will penetrate into a room through a window facing E. or W. and one facing S.E. and S.W. and one facing S. If the noon summer sun glows hot, at least he rides high and doesn't come very far in and can be kept out with a very moderate canopy.



A. B. Next, let us consider what time of day we  
Rooms want our sunshine in our different rooms,  
No. 3 and it will help us to make our individual  
judgments if we lay them out in a circle. Of course



No. 4 a very good view or a very bad one may enter into our calculations and cause us to modify our judgment as to "aspect" on account of a problem of "prospect".



The vile habit of the Queen Anne front and the Mary Ann back may tempt us to sin against the light in this very literal sense.

Apart from such disturbing factors we may arrive at something like diagrams A & B for a highly organized home or an abstract of all this as shown in diagram C. & D for a small house.

#### The Semi-Detached Problem.

If these are to be considered essential requirements, then when a pair of semi-detached houses are built for the cooperative convenience of mitigating each other's heat losses on one side out of four and sharing the cost of the fourth wall it follows that if the pair are symmetrically planned, as is usually the case, they cannot possibly both be good homes, for there are not two suns going round in opposite directions. The better one of these houses may be in this respect, the worse will be the other.

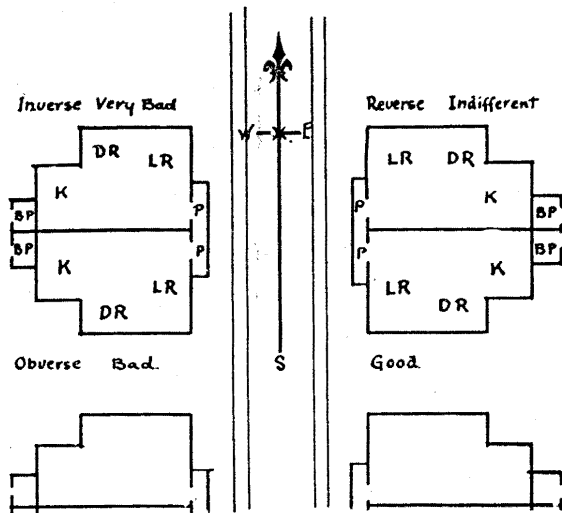
No. 5 And again, if the general arrangement of Two any house is excellent with respect to aspect, Pair and there is another house on the opposite trical side of the street having the same arrangement of rooms with respect to its street front, this second house will be a poor home.

What happens when our friends the speculative builders get busy making all sorts of economies for their and our benefit, is that they include among the things that have to be done without the brain power and brain time of the planner,



## N° 5 ASPECT

Sacrifices for Street; Prospect only Considered.

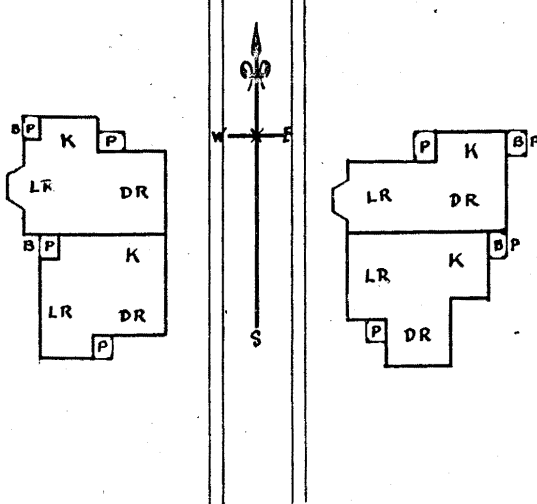


They build town houses in groups of pairs on both sides of a street, so that for any one plan which may be right, there is a reverse and an obverse and an inverse plan, all more or less wrong. So that about 75% of such houses are monuments to bad business and to bad citizenship.

No. 6 Now, with less rubbish on the fronts of our houses and more decent buildings on their backs, and with yards, gardens and back lanes taken seriously as a part of the homes they surround, the temptation to plan the public rooms to the street, regardless of the sun's orbit would be removed. Then with the exercise of a little discretion in such a case as we have been considering, four different plans are arrived at, and an

## N° 6 ASPECT

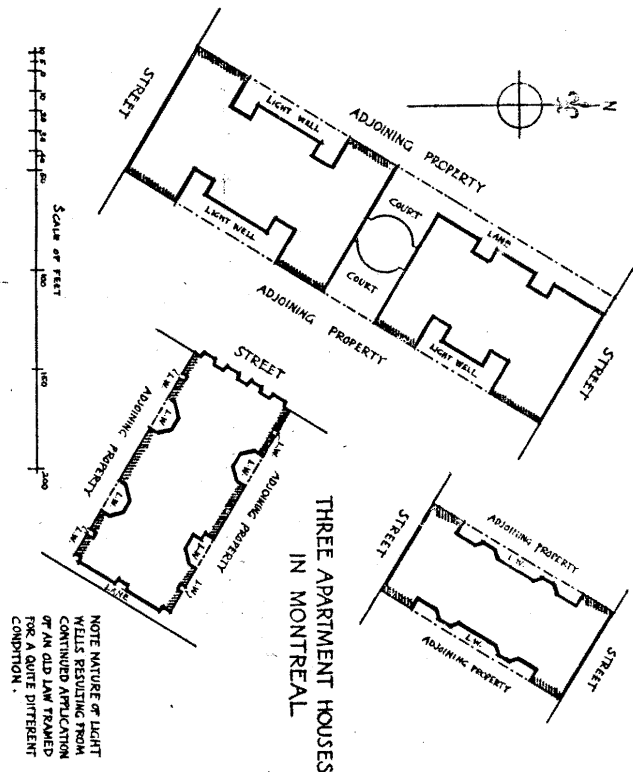
Reasonable Consideration for ASPECT



agreeable variety of external form may be the resulting expression.

## Montreal Apartments.

No. 7 I cannot forego this opportunity of saying a word in protest so far as the question of aspect is concerned at the most recent developments of Montreal apartment planning. The device employed to appropriate light for the rooms set back from the streets by means of re-entrant bays in the party walls is unfortunately strictly in accordance with an ancient by-law framed by persons who



never contemplated the achievement of ten and sixteen storey buildings and to whom it probably never occurred that anyone would build over every possible square inch of a site and hang out oriel windows into the bargain. Such a building at once ruins a number of homes in its neighbourhood by its shadow. It provides, as a rule, a few over-sunned and a number of under-sunned homes in exchange, and these are lighted only for such time as the re-entrant bays or wells remain unobstructed by future buildings. When these are built up, a first-class slum is inevitably created. Whether the fact that such structures depreciate the real estate in their neighbourhood is to be recorded to their credit I am not enough of an economist to say.

But, as we are dealing with homes, such abnormal

expedients for the housing of the unprolific need not detain us.

### Co-Partnership Building.

Co-partnership, when it at last gains acceptance here, may be expected to bring about a very much higher standard of planning generally and incidentally more sunshine in the home.

If the speculative builder can only afford one plan when he needs four to build houses by the dozen, the Co-partnership community cannot afford to place one house without a duly considered plan when buildings by 50s or 100s.

Then again, such a community can only afford to use plans by the most expert designers. For the last thing that can be tolerated on a jointly owned piece of real estate, when the neighbours are the owners, is that any house should not hold its own with the rest in tenantability.

### Open Planning.

It has been a gradual, and, all things considered, a slow evolution from the closed planning of mid-No. 8 Victorian England, which was followed here Plans in virtue of a common culture, habit and tra-

dition, to the open planning now in vogue for the public or main floor of a house. I look to the principle of the open plan being carried very much further. The public rooms of a house, be it great or small, may be regarded as adjoining places rather than contiguous apartments. Among the many practical advantages of so ordering our lives (for planning can affect manners just as manners can affect planning) is the increased possibility of entertaining wandering sunbeams, heavenly visitants, who enter by a window, traverse two rooms and alight to wander across a wall opposite.

And if the elf accomplish this, what time the prosaic fashion of five o'clock tea is in progress, behold the scene invested with all the glamour and the loveliness which Watteau or Monticelli considered appropriate to gossip and confidences. Or again, by a little arrangement, an eight o'clock in the morning, first-worm sunbeam, and there is no better kind, may be inveigled to assist at the breakfast table twice or four days a week, and when he comes he will go far to mitigate the austerity of the proverbially difficult ritual of the breakfast of the Briton.

### The Open House.

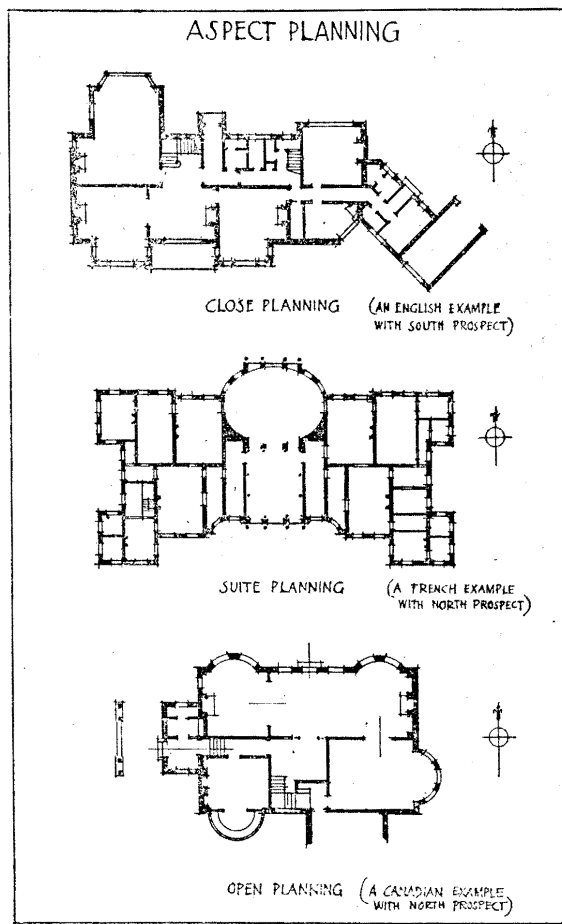
So, if you would keep an open house, which is the only kind worth keeping, let me recommend to you the employment of the mechanism of the open plan, and may you have a full view of open sky from every window and a garden clinging to all your sills. And if it befall you to have a view of a river, a city, or plain and mountains, or any of these things, you have all you need of the inanimate to make your home perfect, and the rest of your happiness is wholly a matter of good fortune and past mere contrivance.

So, we may consider that we have our house, and that its windows, for the most part, let in the sun for a part of each day. Now, what are we to do with these windows? Dressing them up indiscriminately in underclothes and overskirts because '*c'est le coutume*' will, as I said at the beginning only neutralizes our windows.

I must again remind you that the interior of your house can only be worth looking at if there is enough light to see it by, that is to say, enough light to break into component colours and reflect and catch and exclude and generally play hide and seek in it.

### Interiors.

Now, there are two kinds of interiors—those in which the interior, be it a child's bedroom or a mag-nate's dining-room, a long gallery, or just a nice place





to sit in, is itself a work of art; and those in which the interior, as such, is of very secondary interest to the objects in the room, pictures, bric-a-brac and the like. Now, this second kind of place is really a museum, and I am confining my remarks to houses. The lighting of museums is a mere exact science. I said there were two kinds of interiors, and the first kind, which was itself a work of art, particularly interests us just now. Of course, there is the third kind, which the light only reveals in the hideousness of itself and its contents, but that kind is negligible from the point of view of lighting, and only the "gross darkness of the inner sepulchre" will improve it to its limit of perfection.

### The Thing Seen.

What, then, are our problems when the room itself is to be considered as a thing to be seen and apprehended. Ultimately the *thing* seen is just the cunningly devised way the light comes in, as in the case of the interior of Milan Cathedral, and that is all there is to be said about it. Well, let us consider the way the light may come in, and what happens to it after it has come.

The first point to be made clear, and never to be forgotten when arranging a place with the care one would bestow in composing a picture, is that one does not require a great deal of light to see by in comfort. And the second is that an unconscionable amount of light can be absorbed by a dirty ceiling or a dark wall-paper. How is it that so many otherwise harmless persons put deep blue papers on their walls. Really, there is no such colour in decoration, except in conjunction with lots of bright gold as in the ceilings of glittering mosaic lined churches in the torrid zone.

### Curtains.

And the third point is, that a very moderate sized source of light will illumine a lightly coloured interior.

If the opening is so big as to admit more glare than is agreeable, and a diffused soft light is desired that *cannot* be attained by leaving part of the window clear and draping three-fourths of the remainder with semi-transparent picabou stuff and hanging over the edges gorgeous curtains, whose colour of course cannot be seen against the light of the window. But a veil of India muslin over the whole window and hung some distance from it will do what is wanted as Mr. Lavery has shown in several of his portraits of ladies as seen in their natural surroundings.

### Light and Colour.

One of the most important things a modern musketeer has to learn is the effect of light on things

seen—again I lapse into truism. He learns that all colours are pretty much one faded grey colour looking towards the sun, and that a high sun reveals little of different distances as compared with a low one behind you. But windows often get placed in houses without much reference to what they are to illuminate, and after they are there, things are arranged as often as not without any consideration of what colour can be got out of them. There are hundreds of low-toned Dutch paintings, requiring a liberal supply of the purest daylight for their proper appreciation, which are hung on ill-illuminated dark-coloured walls in this city. Often a hideous lighting fixture attempts with a bright yellow light to redress the wrong so done to pearly greys, and attests our widespread inattention to this question of what windows can do for things meant to be seen.

Some of the most charming effects of lighting are to be got in connection with open planning, by playing with varied systems. For instance, one may look from a place of diffused moderate light, through a place of low light, to a place of brilliant illumination, or through a place of brilliant illumination towards a window situated in a place of sombre light. These are the effects that the mediaeval architects delighted in for church work. The bright diffused cross light of the transept often throws the choir back into a distant mystery so to speak. But no system of lighting, whether in church or house, is so thoroughly unpleasant as a main source of light at the end of a long room, passage or church nave, unmitigated by side or cross lighting. (It has been reserved for the modern builders of cheap churches to carry this abuse to its limit). This arrangement is only tolerable when the glass is pictured richly in the velvet tones, Keats had in mind when he describes an ancient window in 'St. Agnes' Eve' as "like to the tiger moth's deep damasked wing". With clear glass, or the thin high-keyed abomination which some modern glass stainers mistake for colour, that effect is intolerable. Of course, the more light you have 'in your eye' the less you can see, and a degree of light which, diffused out of doors, is quite comfortable, may become an actual deterrent to visibility when admitted all at one point to an interior. For internal effects the best results are obtained usually when one is so placed that the sources of light, that is to say the windows, do not come into the field of vision.

### The Outside View.

But where splendid or interesting views are obtained through windows the case is different and much internal interest must be readily sacrificed as a mere setting or frame for the view. Where such a very legitimate use is made of a window, it is well to get a good cross light in the immediate neighbour-

hood of the view window to modify its unscreened potency.

The commonest error is in the case of overwindowed rooms, where dark walls or hangings are relied on to absorb the superabundance of light. One sees little in such a room for the windows only tell more palpably owing to the mistaken remedy; a reduction or a veiling of the windows is what is called for in such a case.

I have said nothing of artificial lighting, diffused or concentrated, and little or nothing of the effect of lights of different quality on colour, or of colour as a qualifier of light, but I have said enough to show that by taking thought one can add many cubits to the potential visible size of an interior and infinite values to all one's daily surroundings.

### **The Enchanting Light.**

After all, the objects that constitute the apparatus of life, whether utilitarian or professedly decorative, are often ugly in a very limited sense, and usually capable of enchantment either by placing them in a proper light or by modifying their lighting. What we admire in a Velasquez or a Rembrandt picture, we can achieve in our own parlours. But, strangely enough, it is the people who are the first to appreciate this thing in a picture, who are the last to apply it in their daily lives.

Personally, I like to know that on a summer morning, whether I am there or not, the sunbeams will play a game of hide and seek among the legs of my dining room table and chairs on a golden yellow rug; and that, at five o'clock on an autumn afternoon the river and the hills beyond will become a fairyland of light seen through my windows, while the shadow of the mountain encompasses my dwelling-place in a rich shade, and that, just before this mystery begins, my last streak of sunlight will play on the tea table. One way of expressing my satisfaction in these things is to say that both phenomena are eminently paintable but some of us prefer the contrivance of fair realities to the painting of pictures of Nature's accidents of light.

The appointment of a civic town planning commission costs nothing, as a commission, but it is the first indispensable step toward town planning activity in the towns and cities. If this is disputed it is only necessary to point to the fact that town planning activity is greatest where a commission has been appointed. In Ontario commissions have been appointed in Ottawa, Oshawa, Hamilton, St. Catharines, Kitchener, Waterloo, Guelph, Brantford, Niagara Falls, London and Welland and these are the cities that are moving most rapidly to effective town planning.

## **TOWN PLANNING AT THE UNIVERSITY.**

By Professor Adrian Berrington  
Associate Professor of Architecture, University of  
Toronto\*.

A statement of the "academic" or detached scientific approach.

What have we as a university class, instructors and students all mixed up together, to do? What is our function?

I would define that function as four consecutive processes. First, to define, to ascertain what really we are studying, what, after all, is Civics and Town-planning. Secondly, to study it. Thirdly, to bring our studies to the point of definite knowledge and clear doctrine. And finally to declare that knowledge and that doctrine to whosoever wishes to hear.

Freely to declare it. But not, I think, to shout it from the housetops, or to force it by other means upon unwilling ears. A class at the University must never rend the academic atmosphere with that raucous violence to the soul, which in these days is called advertisement and propaganda. Let us leave all that to the world outside.

### **What "Civics" Means.**

Firstly, then, I have said, we must know what we are about; what exactly is meant by Civics and where are the boundaries of what is called Town Planning. I have already referred to the welter of analytical sciences, departments of knowledge, with their partial liaisons, perennial restatements and superseded conclusions, which makes the intellectual picture of our time. I have spoken of the tendency or impulse towards synthesis, towards coordination in thought and co-operation in action, which is indubitably there. I liken this impulse to an undercurrent, presaging, as it were, a rising tide—before that tide a great ship is nearing home. Her hold is filled with a cargo bearing many outlandish labels. With Ethnography, Demography, History, Economics, crowd-psychology, folk-lore and many other burdens, she sails in from all the scattered ports of knowledge. She flies the ensign of the commonweal, and her name, in the deplorable nomenclature of our time, is Sociology. And the process by which her cargo of the raw material of all the 'ologies is turned into the finished product of action upon life, is called civics. Civics is the content of sociology turning to human uses. History is trans-

\*Extract from address delivered to the students of the Extension Course in Civics and Town Planning at Toronto University.



mutated into a conviction of the necessity of justice and toleration. Economics becomes a care for equity and the fitness of the means to the end. Demography guides an enlightened politics, and ethnography, with its varied train becomes a broad-based sympathy with the people. The knowledge percolates, precipitates and crystallises into action. It becomes, in two words, good citizenship. Civics is the science of that transmutation. It is the foundation of good citizenship.

### **The Town Planner's Part.**

Now, why is it that town-planners should study Civics, in all its ramifications, more broadly even than the good citizen himself? The answer is not difficult. The town planner has to clothe forms which Civics produces, he has to employ the ideals of the citizen, or at any rate to give effect to his desires. So must a tailor study the shape and form of his client, more than the client himself has ever studied; he has to fit that form and shape. Sometimes even he must shape the form itself. So with the town planner. He must fit out the community. And he must, too often, just make the best of a bad job. To that end he must have a developed and instructed conception of what a good job really would be. And if it be true, as is said, that a tailor is the ninth part of a man, then the town planner's function is the ninth part of the activity of a community. It is no small share, a ninth. It gives him his niche in the temple of the communal Muses. But let him beware of trying to make his customer wear silks and satins when that good man prefers straight broadcloth. Propaganda, uplift, social reform, these things are not his function as a town-planner. Their pursuit exalts advocacy, often to the obliteration of knowledge. The town-planner as such, may say to the city: "tell me what you want and I will show you how to get it." Or: "show me what you are doing and I can tell you where you are going. I advocate neither this nor that; I merely know."

### **His Peculiar Province.**

In our limited life, to know profoundly, implies wide ignorance. What must he know, with what can he dispense, our unalloyed town planner? He need not be a sewage and water supply engineer; but, he must know how to plan so that the engineer's problem may be economically solved. He need not be a constructor of roads. But he must know the types of roads, their cost and suitability to various uses. He need not be a designer of small houses; but, he must have the skill and knowledge necessary for their proper placing. He need not be an architect; but, he must know where the great buildings

of a city should be found and how they should be set and grouped. In short, his function involves as much acquaintance with existing specialisations as do those of the engineer and architect with the building trades, business and the law. He, like the architect and the engineer, is a designer and co-ordinator of parts. Their units are the fractions of his problem. His is certainly the ninth part—if not more—of the outcome in action of the civic impulse. Now what, apart from elements of all the existing specialisations, must be study? What is there, that no one else need know, that he must know? As with the architect, there is hardly any limit to what he might know with advantage. But what is his peculiar field? What beyond all these other things, must he study?

### **What he Should Study.**

Well, primarily he must study the morphology, the anatomy the physiology and the biology of towns. He must study, that is to say, their form, their structure, their working and their life. He must study these things as the physician and the surgeon have studied them. And he must bring to his studies something of the fervour and the faith of those earlier investigators who believed that their work would one day produce a homunculus.

He may begin with the embryology of his subject. He will trace his town back to the first unit—the single cell, possessing in itself all the vital attributes and potentialities of the full grown city. Then he will discover cities which sprang full grown from the parent state—and probably decide that this is the more fruitful branch of enquiry. These places were planned and functioned from the outset. Town-planning pure and simple! And as the student's range widens and he passes from origins to development—to the biology of cities, he finds disconcerting varieties of fate. Of three new towns, starting in equality, one flourishes, one languishes, one fails. No more than any other is this organism self-sufficient. As all those others throughout the realms of zoology and botany, it must suffer the functioning of its environment. The student realizes that no city study is complete without an equal study of its region. He finds that the boundaries of the region are not simple matters of geography. They are the shifting limits that economics seeks to register and that history frequently explains. He seeks a path, a rendezvous, in the ever widening magic forest of fact. He decides that it is some science of the economic placing of cities he is by way of discovering. He will find that both city and environment are functions mutually of each. He will try to isolate controlling factors. The distinction between

city and metropolis becomes clear. It is an interesting study.

So is that of the anatomy and the physiology of towns. From the village with its rudimentary organs, to the ideal metropolis with its fully articulated parts, one traces the comparative size and development and the action in health and disease of each element of the civic organism. In these earlier stages the organism breathes easily and happily through all its pores, later on parks have to be frantically improvised. The nutritive system tends, as the thing grows, to become ill-balanced, parts being over and parts under nourished. This is not solely due, as a rule, to organic defects. Circulation becomes congested. Savage *tours de force* of surgery are performed. One studies reasons for the effects of these. As with human surgery the effects are often unpremeditated, and undesired. They must all be learned. No two cities are precisely the same. No two men are. But in certain respects both men and cities are sufficiently similar for study on that basis.

#### Where Knowledge Gives Place to Judgment.

The great differences will be found to be those of character—as is the case with men. It is perhaps baffling to the aspirations towards exactitude in science. For we must admit that character, a force not subject to any form of mensuration, is yet the dominant at every point. We can note, for instance, the slow or speedy subordination of the manual to the cerebral functions and the digestive derangement resulting. There is a curiously exact simliarity between man and his city in this respect. But though in a given case we can tell, with a fair probability of being near the mark, what the general resultant will be, we cannot yet decide its direction, or, more disastrous still, prescribe its cure. Character dominates. National character, racial character, regional character. History helps us here, comparative history more particularly. The most accomplished student of character will not disdain a dossier of his subject.

Thus our studies, which should lead us to a point of knowledge enabling us to diagnose and deal with the city's ills *in so far as these are matters of plan and structure*. If we can bring our science even so far as the medical profession has brought its knowledge of the human body and our skill to a similar degree of certainty of effect, we may begin to accept homage and respect as town-planners. "City surgeons" would in many cases be a happier name.

#### Our Present State.

At present, speaking very generally, our civic development is still at the stage of home cures, cupping and nostrums. The domestic city planner ap-

plies his poultice of necessary "improvements" to the affected ward. The practitioner chirurgion bleeds us, clearing one slum in such a way as to create another. We drink off stiff and expensive doses of "more-street-cars" or "wider-streets-and-plenty-of-them" and bolster our faith by reading the advertisements of these much advertised specifics. But all too seldom do we even attempt a scientific survey, diagnosis and cure based on the manifold studies of which I have spoken. And until town planners can present a mass of knowledge, which is both broad and deep and demonstrable in action, they will remain—political considerations and clap-trap apart—the generally disregarded folk they are to-day.

#### Where we Could Begin.

I have said "knowledge demonstrable in action" and I think the first steps in the kind of action required are perhaps the competence of a class such as this—students and instructors all mixed together. For instance, we might establish beyond question the necessity of the civic and regional survey. We could make progress towards fixing standard scales and colours and systems of notation. We might establish certain definite units of mensuration. There are several to be worked out. Take for example the hour-load-street-width. It is a matter of observation, counting and measurement, the object being to construct a scale, with a medial zero and then a notation applicable to the C. & R. Survey plans. There is the season sunshine angle to be worked out in connection with a scientific building height, to supplant our present by-law rules of thumb. Time-fare-distance, again, requires scale and notation; the time distance factor in relation to static public services is a simple matter, though both have to be read in the cross light of volume of usage returns. Without pedantic elaboration these things and others might be crystallised and their notation fixed, always remembering that over our measurable elements of length, breadth, height and time-distance there is a fifth, the quintessential, which holds ultimate dominion. I mean the apparently incalculable element of the habits, manners, customs, caprices and accidents of man—which, to the seeker after knowledge, are not always found to be so very capricious and accidental as the subject would have one believe after all.

#### Profiteers of Disorder.

Those who profit by the existing order have established a system which punishes originalty and starves imagination from the moment of first going to school down to the time of death and burial.

Bertrand Russell.



## NEWS AND NOTES.

**Annual Meeting.**

The annual meeting of the Town Planning Institute of Canada will be held at the Chateau Laurier, Ottawa, on Friday and Saturday, May 12th and 13th. The secretary will inform members of programme and business arrangements in due course.. It is much regretted that Dr. Deville, who has given such faithful and conspicuous service to the Institute during his year of office, cannot see his way to accept nomination for another year..

\* \* \*

**Plan for Ottawa.**

Mr. Noulan Canchon, whose interesting scheme for a Federal District of Ottawa is illustrated in this number, is vice-president of the Town Planning Institute of Canada and chairman of the Ottawa Town Planning Commission. In the latter capacity he is preparing a progressive plan for the city of Ottawa and is conducting a series of public lectures intended to inform the citizens of the utility and rationale of town planning.

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**Building By-laws.**

There is an excellent chance for some Canadian city to become famous. Inquiries are constantly reaching The Journal from city officials as to the direction where they may look for a simple modern and model set of building by-laws now in operation in Canada. Westmount, Montreal, must have already attained a certain amount of quiet fame and the good will of the Mayor been tested in handing out to strangers copies of the Westmount building by-laws. It is being widely realized that most of the disaster of city building—affecting the health and efficiency of citizens and the economy and prosperity of cities to an extent that is only beginning to be realized—is due to the existence of building by-laws half a century out of date and conceived under conditions entirely different from those of a developed modern city.

In the city of Vancouver the Chinese quarter has been an open sore for decades. Yet little improvement has been made and inspectors and health officers put the blame on the inadequate building by-laws.

Here is the report of an eye witness taken from the Vancouver World:

A rat scurried across the floor. Other rats could be heard fighting and squealing behind the piles of vegetables on the floor. Crouched be-

side a smoking, greasy stove was an old Chinaman, tearing a crab to pieces with his fingers and noisily sucking in what white meat he could extract from the shell fish. In one corner was the inevitable bunk, piled high with grimy blankets and other rags. It had not been made up, and looked as if it never would be. The floor was a litter of filth and dirt of all descriptions. And this is a storehouse for a Chinese peddler! It is the place where other peddlers come to load up their carts and take their truck around the residential portions of the city! Down in the basement of a ramshackle building, with no windows, and only the one basement entrance, in murky darkness which makes it imperative to keep lights burning all the time, always smoke-filled, with the walls shining with grease and heavy-coated with cob-webs, the Chinaman is the guardian of the storehouse. He it is who, with the same greasy fingers with which he tore open the odiferous crab, counts out the cabbages and other vegetables which he hands over to the men with the carts. It is going on, day after day, less than two blocks away from the City Hall, and is only another of the disease-breeding places in Chinatown which are being occupied when it should long ago have been condemned as unfit for habitation. The old Chinaman sits, stolidly waiting his wagon peddlers, and when they arrive the vegetables which have been stored in the dirty cellar are taken out to the homes in Vancouver. And a few blocks away is the tubercular clinic!

Recently the quarter has been proved to be the centre of an infamous drug traffic that is corrupting the young life of the city. Now a vigorous demand is being made for revised by-laws.

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**Model By-laws for Ontario.**

The interesting announcement is made in the Ontario Report re Housing, 1921, that Mr. James Govan, consulting architect to the town planning department of the Ontario Government has prepared a set of modern building by-laws, to be submitted first to the municipal council of the new town-planned town of Kapuskasing, but later to be issued for the benefit of any city council in the province who wish to reconsider their building by-laws. The statement is made that "outside the larger cities of Ontario there are many municipalities which have no building by-law." It is safe to say that if these by-laws are published the demand for them will be instant and extensive. In Britain the by-laws of local councils are practically always based on models prepared by the central authority—formerly, the

Local Government Board, now the Ministry of Health—which has the advantage of the accumulated experience of the towns and cities.

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### By-laws and Zoning.

Judging by the excellent plans of the new town of Kapuskasing it is practically certain that Mr. Govan's suggested by-laws will take full account of the new demand for zoning. Indeed, if this were not done it would simply mean that the work would have to be done over again at no distant date. In the United States something like 150 towns and cities have passed zoning laws and business men and residents as well as private citizens are asking before they settle: "Is it a zoned city?" If it is they know that their property will be protected and will not be destroyed by incongruous environment. The city of Ottawa is preparing new building by-laws and is wisely considering zoning necessities as the most important part of the work. It is now well-known, or should be, that zoning is possible under Ontario law.

Mr. Herbert S. Swan has put the argument for zoning as follows:

Zoning expresses the idea of orderliness in community development. Just as we have a place for everything in a well-ordered home, so we should have a place for everything in a well-regulated town. What would we think of a housewife who insisted on keeping her gas range in the parlor and her piano in the kitchen? Yet anomalies like these have become commonplace in our community housekeeping. In what city do we not find gas tanks next to parks, garages next to schools, boiler shops next to hospitals, stables next to churches, or funeral establishments next to dwelling houses? What would be considered insanity if practised in the ordinary house is excused as an exercise of individual liberty when practised in the city at large. And yet misplaced buildings are to be condemned much more than out-of-place pieces of furniture.

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### The Kapuskasing Town Plan.

With the next number of The Journal we shall be able to issue with each copy, by courtesy of the Ontario Bureau of Municipal Affairs, a full report of the town planning project undertaken at Kapuskasing by the Ontario Government, accompanied by eleven maps and plans, which will show graphically the evolution of the project. If the scheme meet with the sympathetic and intelligent co-operation of the local officials of the new town and development proceed with reasonable rapidity—according to the present economic promise—Kapuskasing may become the Mecca of progressive municipal officials in Canada just as Letchworth has become the cynosure of reformers in England. If this become the case the bill for local advertising need not be made out. Kapuskasing will wake to find itself famous.

Prices of Building Materials.

According to MacLean's building reports the downward trend of the cost of building materials was suspended during February when the prices advanced again. The wholesale prices of 48 building materials are now 89% above those of 1913, though they are 51.6% lower than those of May 1920, when the advance figure was 183.8%. In view of these prices unprecedented methods are being adopted to provide homes for working people. New Zealand has frankly adopted national housing as part of its immigration policy, with town planning as an additional incentive. The following significant paragraph appeared in The Vancouver World:

### Prices of Building Materials.

New Zealand has stolen a march—and good luck to her—on her sister dominions. The other day the liner *Watma* left Southampton Harbor for New Zealand with 995 settlers on board, all of the artisan class, and the head of each family guaranteed employment and housing accommodation upon arrival.

On Saturday a steamer left England for Canada. The Dominion News Service says she has but a handful of passengers who can rightly be styled settlers. The situation speaks for itself. The country wakened none too soon to the need for a change of policy. Railways, lands and industries in Canada alike feel the need for increased population.

The State of Oregon has appropriated \$34,000.000 for the State housing of its returned soldiers and has already had 7,000 applications for loans. The State commission on housing, it is reported, "sees a remarkable chance of demonstrating to the State one way of solving the housing problem for the working man."

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